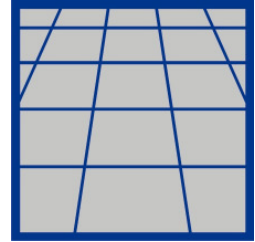


Screen printing media



DECOFLUX W, DECOFLUX WB

Application

Screen printing media combined with decorating colours form pastes for the **direct decoration** of tiles via the screen printing process.

The following excellent properties are shown upon application:

- excellent pigment absorption
- pigment dispersion properties
- stable viscosity of the pastes
- good printing properties
- highly accurate reproduction of the printed design
- uniform colour shading during extended printing time
- screen removal without sticking
- drying behaviour related to the application
- no tendency to dry on the screen

Screen printing media are available for **use with or without the application of fixative** between prints.

Application without fixative between printing is not only carried out for economic reasons, but also for technical considerations: when multicolour decorating, the amount of water absorbed by a tile on which the fixative is applied, is relatively large, thus resulting in reduced dry breaking strength of single fired bodies. In double fast firing the excessive fixative application causes prints which dry too slowly or fixative layers which dry too slowly so that they will stick to the subsequent screen.

Depending on the formulation of the screen printing media offered from Zschimmer & Schwarz they can either be used for **single fast fired tiles** (Monoporosa, Monocottura) or for **double fast fired tiles**.

Further products are available for third firing decorations.

Mode of action

The raw material base of screen printing media available from Zschimmer & Schwarz are **organic polymers in aqueous glycols**.

As these additives contain dispersing components, which via an equalization of surface charges cause the neutralisation of attraction forces between individual pigment particles, therefore **agglomerate free pastes** can be produced. Well dispersed pigments are a prerequisite for **uniform colour shading**.

The good printing characteristics result from components which **improve the lubrication properties** and confer a clear structure. These increased lubrication properties allow a **smooth and complete penetration of the paste** over the whole screen **even through the finest meshes**. The removal of the screen after the printing process is possible without sticking. The **perfect printing** and the **stable viscosity of the paste** allow the production of **exact designs** with printing shades that remain constant even over a long printing time.

Screen printing media which are used **without fixatives in between printing**, contain an **additional binder component** which coats the pigments during paste preparation. After printing and drying, the adhesive forces lead to a bond between the design and the glaze surface so that **further decorating layers** can be applied subsequently.

As the screen printing media available from Zschimmer & Schwarz are free from organic solvents, **pollution of the working environment is considerably reduced**. As a result of their solubility in water, cleaning of the working tools is relatively simple.